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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,806	02/20/2004	David R. Cuthbert	M4065.0991/P991	3947
24998	7590	05/03/2005	EXAMINER	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP			HO, TAN	
2101 L Street, NW			ART UNIT	
Washington, DC 20037			PAPER NUMBER	

2821

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/781,806	Applicant(s) CUTHBERT, DAVID R.	
	Examiner Tan Ho	Art Unit 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-23 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Tan Ho

**TAN HO
PRIMARY EXAMINER**

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/23/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "350" has been used to designate both "RF source" and "the left-most vertical portion" in figure 3, the character "450" has been used to designate both "the left-most vertical portion" and "the right-most horizontal portion" in figure 4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Allowable Subject Matter

2. Claims 1-23 are allowed.

Claims 1 and 13 recite an antenna configuration comprising at least three portions substantially aligned in a first direction and coupled together by at least a first two portions substantially aligned in a second direction orthogonal to the first direction, at least a second two portions substantially aligned in a second direction and respectively coupled to at least two of the at least three portions, wherein

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electromagnetic fields to be radiated by the at least first two portions are substantially canceled out by each other, and wherein electromagnetic fields to be radiated by each of the at least three portions are substantially in-phase with each other.

Claim 15 recites at least two portions substantially aligned in a first direction and coupled together by a first portion aligned in a second direction substantially orthogonal to the first direction, at least one of the at least two portions substantially aligned in the first direction being coupled to ground, at least a second portion substantially aligned in the second direction and coupled to at least one of the at least two portions substantially aligned in the first direction, and wherein electromagnetic fields to be radiated by each of the at least two portions are substantially in-phase with each other.

Claim 20 recites an antenna comprising a power source provided in a first portion aligned in a first direction, first and second portions substantially aligned in a second direction substantially orthogonal to the first direction, each having one end connected to a respective end of the first portion aligned in the first direction, a second portion substantially aligned in the first direction and connected to a second end of the first portion substantially aligned in the second direction, a third portion substantially aligned in the first direction and connected to a second end of the second portion substantially aligned in the second direction, and third and fourth portions substantially aligned in the second direction, a first end of each respectively connected to one of the second and third portions substantially aligned in the first direction.

None of the prior arts shows or suggests the above antennas.

3. The patents to Apostolos, Duhamel, Casciola et al, Chu, Thursby et al, and Hampel et al are cited as of interest showing the antenna similar to that disclosed.

Conclusion

4. This application is in condition for allowance except for the following formal matters:

The objection of the drawings.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Ho whose telephone number is (571) 272-1822. The examiner can normally be reached on M-F (8:00AM - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


TAN HO
PRIMARY EXAMINER